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Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

- 1 1. (Original) A method for determining a vehicle trip on a roadway, the method comprising:
2 providing a plurality of vehicle detections from a plurality of gateways;
3 determining a maximum travel time between corresponding pairs of the plurality of
4 gateways;
5 correlating corresponding pairs of the plurality of vehicle detections by determining ~~the~~
6 travel time between each of the gateways of each of the corresponding pairs of detections is ~~less~~
7 than a corresponding maximum travel time;
8 determining a plurality of chainable detections; and
9 determining the boundaries of the trip.
- 1 2. (Currently Amended) The method of claim 1 wherein the providing the plurality of vehicle
2 detections comprises providing at least one license plate image corresponding to one of the
3 plurality of vehicle detections.
- 1 3. (Original) The method of claim 2 further comprising:
2 determining a vehicle license plate number; and
3 processing the at least one license plate image for verifying the vehicle license plate
4 number.
- 1 4. (Currently Amended) The method of claim 1 wherein the providing ~~the a~~ plurality of vehicle
2 detections comprises filtering a plurality of vehicle transactions for providing the plurality of
3 vehicle detections.
- 1 5. (Original) The method of claim 4 wherein the plurality of vehicle transactions includes at
2 least one ambiguous transaction; and

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3 further comprising eliminating at least one ambiguous transaction from the plurality of
4 vehicle transactions.

1 6. (Original) The method of claim 5 wherein the at least one ambiguous transaction includes a
2 conflicting gateway crossing.

1 7. (Original) The method of claim 4 further comprising eliminating dual transactions from the
2 plurality of vehicle detections.

1 8. (Currently Amended) The method of claim 1 wherein the correlating the corresponding pair
2 pairs of the plurality of vehicle detections further comprises determining whether each of the pair
3 of detections is provided by a corresponding pair of gateways that are disposed logically
4 consistent with the roadway topology.

1 9. (Currently Amended) The method of claim 1 wherein the correlating ~~the~~ corresponding pair
2 pairs of the plurality of vehicle detections further comprises determining that the travel time
3 between each of the detections is greater than a minimum travel time.

1 10. (Currently Amended) The method of claim 1 wherein the determining a maximum travel
2 time comprises determining an incident free maximum travel time.

1 11. (Original) The method of claim 10 further comprising:
2 determining an expected travel time; and
3 determining that the maximum travel time is the longer of the expected travel time and
4 the incident free maximum travel time.

1 12. (Original) The method of claim 11 further comprising:
2 detecting a traffic incident; and
3 modifying the expected travel time in response to the traffic incident.

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- 1 13. (Original) The method of claim 1 further comprising waiting for the plurality of chainable
2 detections to be initially processed.
- 1 14. (Original) The method of claim 1 further comprising waiting for the plurality of chainable
2 detections to be verified.
- 1 15. (Currently Amended) The method of claim 13 further comprising determining a latest time
2 for the plurality of vehicle detections.
- 1 16. (Currently Amended) The method of claim 1 wherein the determining the boundaries
2 comprises detecting the end of the trip.
- 1 17. (Original) The method of claim 16 wherein detecting the end of the trip comprises:
2 determining a maximum detection time for the plurality of chainable detections;
3 determining a current boundary time;
4 comparing the current boundary time to the maximum detection time; and
5 declaring the end of the trip in response to determining that the current boundary time is
6 greater than the maximum detection time.
- 1 18. (Currently Amended) The method of claim 1 wherein the determining the boundaries
2 comprises detecting the a start of the trip.
- 1 19. (Original) The method of claim 1 further comprising forming the trip by chaining the
2 plurality of chainable detections.
- 1 20. (Currently Amended) The method of claim 1 further comprising waiting for the plurality of
2 chainable detections to include all vehicle detections that might chain.
- 1 21. (Currently Amended) The method of claim 20 wherein the waiting for the plurality of
2 chainable detections comprises all detections that might chain comprises:

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3 determining a first time wherein each of the plurality of chainable detections has a ~~first~~
4 extrapolation region terminating earlier than the first time.

1 22. (Currently Amended) The method of claim 21 further comprising:

2 determining a second time wherein each of the plurality of chainable detections ~~occurring~~
3 later than the first time has a second extrapolation region terminating earlier than the second
4 time, ~~is evaluated for verifying.~~

1 23. (Currently Amended) The method of claim 22 further including verifying transactions ~~a~~
2 vehicle detection from among the plurality of vehicle detections occurring between the first ~~time~~
3 ~~interval~~ and the second ~~interval~~ time using a video image of a license plate number captured ~~at~~
4 the time of the vehicle detection.

1 24. (Currently Amended) The method of claim 22-23 wherein the verifying a vehicle detection
2 ~~transactions~~ comprises automatically recognizing the license plate number from the video image.

1 25. (Currently Amended) The method of claim 22-23 wherein the verifying a vehicle detection
2 ~~transactions~~ comprises manually reading the license plate number from the video image.

1 26. (Currently Amended) The method of claim 1 wherein the plurality of vehicle ~~transactions~~
2 detections is provided by at least one of:

- 3 an enforcement gateway; and
4 a toll gateway sensor.

1 27. (Original) The method of claim 1 wherein each of the plurality of vehicle detections
2 comprises:

- 3 a time of the detection; and
4 the location of the detection.

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1 28. (Currently Amended) The method of claim 1 wherein the determining the boundaries of the
2 trip comprises using at least one of:
3 a traffic incident; and
4 a set of billing policies.

1 29. (Original) A method for determining a vehicle trip on a roadway having a plurality of
2 gateways disposed according to a roadway topology, the method comprising:
3 providing a model of the topology including gateway connectivity, a plurality of
4 minimum travel times between pairs of gateways, and a plurality of incident free maximum
5 travel times between pairs of gateways;
6 providing a plurality of vehicle detections;
7 providing a set of rules for applying the model;
8 correlating the plurality of vehicle detections by applying the rules to the plurality of
9 vehicle detections; and
10 determining a plurality of chainable vehicle detections forming the trip.

1 30. (Original) The method of claim 29 further comprising determining a plurality of expected
2 travel times between the pairs of gateways.

1 31. (Original) The method of claim 30 further comprising chaining the plurality of chainable
2 vehicle detections for forming a potential trip.

1 32. (Original) The method of claim 31 further comprising verifying a license plate reading
2 corresponding to at least one of the plurality of chainable vehicle detections.

1 33. (Original) The method of claim 32 further comprising waiting for required verification of at
2 least one of the plurality of chainable vehicle detections in the potential trip; and
3 chaining the plurality of chainable vehicle detections to form the trip.

1 34. (Original) A toll collection system comprising:

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1 a plurality of gateways;
2 a trip determination processor comprising:
3 a transaction processor;
4 a vehicle detection correlation processor coupled to the transaction processor and
5 adapted to determine at least one of whether a travel time between pairs of gateways is less than
6 a corresponding maximum travel time and whether a travel time between pairs of gateways is
7 greater than a corresponding minimum travel time;
8 a transaction filter processor coupled to the vehicle detection correlation
9 processor;
10 an end of a trip detection processor coupled to the transaction filter processor;
11 a start of a trip detection processor coupled to the transaction filter processor; and
12 a trip formation processor coupled to the transaction filter processor, the end of a
13 trip detection processor, and the start of a trip detection processor.

1 35. (Currently Amended) The system of claim 34 wherein the plurality of gateway-gateways is
2 adapted for an open ticket tolling system.

1 36. (Currently Amended) The system of claim 34 wherein the plurality of gateway-gateways is
2 adapted for a closed ticket tolling system.

1 37. (Currently Amended) The system of claim 34 wherein the plurality of gateway-gateways is
2 adapted for an open ticket enforcement system.

1 38. (Currently Amended) The system of claim 34 wherein the plurality of gateway-gateways is
2 adapted for a mixed open ticket, closed ticket tolling system.